REMARKS / ARGUMENTS

In complete response to the Final Office Action dated November 25, 2005, on the above identified application, reconsideration is respectfully requested. Claims 28-42 are pending in this application.

With this amendment, claims 28 and 38 are amended.

Claim Rejections Under 35 U.S.C. § 112:

Claims 38 – 42 currently stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Claim 38 has been amended to provide antecedent basis for the term "the sharpened end". Due to this amendment, the Applicants respectfully contend that the basis for this rejection deserves reconsideration.

Claim Rejections Under 35 U.S.C. § 103:

Claims 28 – 42 currently stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Saenger et al. (US 3,588,464) taken with Arantes et al. (US 5,512,726). The Applicants respectfully contend that these claims are not unpatentable over Saenger '464 taken with Arantes '726.

Saenger '464 discloses only manual welding operations, while Arantes '726 discloses a robotic welding process. As discussed beginning on page 2, line 18 of the instant application, it can be seen that there are **significant differences** between **robotic welding** operations and **manual welding** operations. Robotic welding practices necessitate considerations different from those encountered in manual welding methods.

For instance, with robotic welding it is necessary to control the additional axis of the position of the filler wire with respect to the welding direction. This is a concern in robotic welding, but not in manual welding. Likewise, it is necessary in robotic welding to readjust the position of the TIG electrode and the weld wire between consecutive welds. In manual welding, these readjustments are made by the welder continually during the creation of the weld.

Manual welding and robotic welding also differ in the level of skill required. To create a quality manual weld **requires a human being** with a high degree of **skill** in the welding field. Welders often spend years learning their craft, and during this time, they progress through various skill levels. With manual welding, it is also difficult to

repeatedly produce numerous welds with identical properties. Even a skilled welder may have difficulty obtaining a consistent degree of quality between welds.

Robotic welding, on the other hand, does not require the same skills as manual welding. Unlike manual welding, robotic welding does **not require a human being** with a high degree of welding skill, because the weld is created by the robot, and the robot is **programmed to perform** the welding operation. Robotic welding also has a **high degree of repeatability** because the robot's programming causes it to perform essentially the same process with minimal variability.

As an analogy, the differences between manual welding and robotic welding are similar to the differences between calligraphy and typewriting. A person seeking to improve type written words would not turn to the teachings of a calligrapher.

As manual welding and robotic welding are different processes, a person of ordinary skill in the art, seeking to improve upon robotic welding methods **would not turn** to disclosures regarding manual welding operations. Likewise, a person of ordinary skill in the art would have **no motivation to combine** the manual welding process of Saenger '464 with the robotic method of Arantes '726. Any combination of these two references, to result in the current invention, would be based upon an impermissible hindsight combination. The Applicants are willing to provide an affidavit to this effect.

For all of the above reasons, the Applicants respectfully contend that the basis for this rejection deserves reconsideration.

CONCLUSION

Accordingly, it is believed that the present application now stands in condition for allowance. Early notice to this effect is earnestly solicited. Should the Examiner believe a telephone call would expedite the prosecution of the application, he is invited to call the undersigned attorney at the number listed below.

Respectfully submitted,

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CERTIFICATE OF MAILING UNDER 37 CFR 1.8(a)

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 24th day of February, 2006.

Diana Guzman